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Moccasin Mountain Tracksite

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Covering an area the size of a football field, the Moccasin Mountain Tracksite preserves thousands of fossilized footprints.

How many kinds of fossil trackways are found here at the Moccasin Mountain Tracksite?

There are at least six different kinds of footprints preserved, which make this one of the highest diversity of fossil vertebrate tracks for the Early Jurassic time period in North America.

The following points and GPS coordinates can be used with the map on the inside of the brochure to help locate a few of the unique fossil footprints at the Moccasin Mountain Tracksite. This is only a sampling of the tracks at the site. Keep your eyes open, there are lots more to be found.

POINT 2

Large, four-toed tracks, called *Otozoum*, (pronounced *Otto-zoh-um*), were made by 20-25 foot-long, four-legged, long-necked, plant-eating dinosaurs called *prosauropods*.

POINT 3

The smallest three-toed tracks are approximately one-inch long and were made by a crow-sized meat-eating dinosaur species.

Dinosaur Artist: Russell Hawley
Photographers (in alphabetical order):
Brent Breithaupt, Neffra Matthews, and Tommy Noble

POINT 4

The most abundant tracks at the site, *Grallator*, (pronounced *gral-ay-tor*), measure about five inches in length and were made by a meat-eating dinosaur approximately six to nine feet in length.

POINT 5

The largest three-toed tracks at the site are ten to twelve inches long and are called *Kayentapus* (pronounced *Kay-en-ta-pus*).

These were made by a 15-18 foot long, carnivorous dinosaur.

The three-toed tracks that look like they were made by birds were actually made by two-legged meat-eating dinosaurs distantly related to *Tyrannosaurus rex* and *Velociraptor*.

POINT 6

The unusual looking tracks that look like long scratch marks are "slip" tracks, made when the *Kayentapus* track maker walked down the steep slope of a wet dune face and the sand recorded the motion of the animal's foot. This type of dynamic activity is also recorded in other trackways here.

POINT 7

Small, four- or five-toed tracks were made by four-legged animals such as early crocodilians, lizards, and mammal-like reptiles.

What can scientists learn from the tracks?

Conditions that are good for preserving trackways may not be ideal for preserving bone. Therefore, fossil tracks may be our only evidence that animals were present in an area. Fossilized tracks can tell scientists a lot about prehistoric animal behavior. How did the animal walk? How fast was it moving? What direction was the animal traveling? Which animals may have moved in groups? Daily events of an animal's life can be preserved in mud and sand.

Protecting the Tracksite

The area is closed to off-highway vehicles to help preserve the tracks. The sandstone they are in is fragile and can even be damaged by foot traffic when wet.

Molding, casting, carving, collecting or defacing any of the tracks is illegal, and it also ruins the experience for other visitors. We need your help to prevent additional such damage.

Fossil tracks are paleontological resources that are protected by the law.



The image above is an example of vandalism that occurred when the track was illegally molded.



Moccasin Mountain Tracksite

GPS locations are given in NAD83 UTM 12S. Observed positions may vary as much as 10 meters depending on type of GPS instrument used and the availability of satellites.

POINT 1 - 338634E; 4096677N

POINT 2 - 338620E; 4096672N

POINT 3 - 338609E; 4096673N

POINT 4 - 338607E; 4096674N

POINT 5 - 338570E; 4096685N

POINT 6 - 338598E; 4096673N

POINT 7 - 338595E; 4096666N

0 3 6 Inches

0 1 Inches

0 1 2 Inches

0 3 6 Inches

0 3 6 Inches

A 0 2 4 Inches

B 0 1 2 Inches



What was Utah like 190 Million Years Ago?

POINT 1

This location provides an overview of the Tracksite. Here the fossil tracks are preserved in layers of the Navajo Sandstone that formed 190 million years ago in one of the largest sand deserts that ever existed on earth. At the time, what is now Utah was closer to the equator and part of an enormous sandy desert. Hundreds of huge dunes, perhaps as high as a thousand feet, surrounded this area. Normally hard to find, water was seasonally available here, which drew animals from far and wide. Tracks were formed as the animals walked on wet sand and silt around the oasis, which molded their feet. These molds were then buried by more sand, allowing them to fossilize.



190 million years ago Utah was flat, with highlands to the east and west, and was blanketed by huge sand dunes (shown in yellow) shifting over an arid, hostile desert landscape. *Ron Blakey, NAU Geology*



Where is the Moccasin Mountain Tracksite?

Located 3.5 miles southwest of Coral Pink Sand Dunes State Park entrance, the Moccasin Mountain Tracksite is located on Bureau of Land Management lands managed by the Kanab Field Office in Kane County, Utah. No facilities are located at this site, bring plenty of drinking water. Use fees are not required.

Getting to the Tracks

The turnoff is located on the Yellowjacket Road, 6.9 miles from the intersection with Hancock Road. The route to the Tracksite has deep sand and should not be attempted in low-clearance vehicles, busses, and RV campers. These vehicles can park at the turnoff. High-clearance, four-wheel drive vehicles proceed 2.2 miles south, staying left at each fork. Park to the north of the fence and enjoy the short walk along the wash and into the site.

